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### BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RAELYNN A. SINK, JILLIAN CARPENTER, and JOHN COATS

Appeal 2016-004713 Application 12/043,055 Technology Center 3600

Before ST. JOHN COURTENAY III, THU A. DANG, and JAMES W. DEJMEK, *Administrative Patent Judges*.

COURTENAY, Administrative Patent Judge.

#### **DECISION ON APPEAL**

#### STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–11 and 14–23. Claims 12 and 13 are cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

#### The Invention

The disclosed and claimed invention on appeal "describes processing ticketless travel transactions." (Spec. ¶ 6).

## Independent Claim 1

1. A computer-implemented process for processing ticketless travel transactions, comprising:

determining, by one or more processors, that a first travel provider is a travel provider that permits processing of virtual travel transactions without issuance of any electronic or physical ticket;

determining, by the one or more processors, that a travel segment is eligible to be processed with a virtual travel transaction without issuance of any electronic or physical ticket;

generating, by the one or more processors, an electronic reservation record for a traveler without issuing any electronic or physical ticket, the electronic reservation record being associated with the virtual travel transaction and comprising a reservation with the first travel provider for travel along a travel segment;

requesting, by the one or more processors, a virtual transaction value associated with the travel segment, the virtual transaction value being unassociated with any electronic or physical ticket, but being accounted for in a substantially similar manner as is an electronic ticket or a physical ticket, and providing exclusive evidence, absent any information associated with an electronic or a physical ticket, that the first travel provider has reserved a seat on one or more first travel conveyances for one or more dates specified in the electronic reservation record;

adding, by the one or more processors, the virtual transaction value to a field of the electronic reservation record;

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determining, by the one or more processors, that a second travel provider is a travel provider that permits processing of virtual travel transactions without issuance of any electronic or physical ticket;

modifying, by the one or more processors, the electronic reservation record based on rebooking of the travel segment from the first travel provider to the second travel provider to provide a modified electronic reservation record including the virtual transaction value;

digitally transmitting, by the one or more processors, the modified electronic reservation record having the virtual transaction value to a remote computing system that uses the virtual transaction value included in the modified electronic reservation record as exclusive evidence, absent any information associated with an electronic or a physical ticket, that the reservation has been confirmed for the traveler by the first travel provider and as proof of a commitment to compensate the second travel provider for servicing the traveler, allowing the second travel provider to fulfill the travel segment on a second travel conveyance and receive compensation for the travel segment without requesting control of any information associated with an electronic or a physical ticket, and improving processing of the modified electronic reservation record performed at the remote computing system by eliminating duplicate information provided in an electronic or a physical ticket;

providing, by the one or more processors, instructions to transport the traveler on the second travel conveyance to fulfill the travel segment; and

receiving, by the one or more processors, the compensation from the traveler as a payment for the travel segment.

## Rejection

Claims 1–11 and 14–23 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

#### **ANALYSIS**

We have considered all of Appellants' arguments and any evidence presented. We disagree with Appellants' arguments. Regarding the §101 rejection before us on appeal, we adopt as our own: (1) the findings and legal conclusions set forth by the Examiner in the Final Office Action (2–6), from which this appeal is taken, and (2), the findings, legal conclusions, and explanations set forth in the Answer (2–10), in response to Appellants' arguments. (App. Br. 14–19). However, we highlight and address specific findings and arguments for emphasis in our analysis below.

Rejection under § 101 of Claims 1–11 and 14–23

<u>Issue</u>: Under § 101, did the Examiner err in concluding that claims 1–11 and 14–23 are directed to non-statutory subject matter?

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[1]aws of nature, natural phenomena, and abstract ideas are not patentable." *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (internal quotation marks omitted)). In *Alice*, the Supreme Court set forth an analytical "framework for distinguishing patents that claim laws of nature, natural phenomena, and

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abstract ideas from those that claim patent-eligible applications of those concepts." *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)).

Here, Appellants contend the "Office Action's characterization of the claims is overbroad." (App. Br. 15). However, because "applicants may amend claims to narrow their scope, a broad construction during prosecution creates no unfairness to the applicant or patentee." *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (citation omitted).

Appellants further contend, inter alia:

To perform the recited actions for achieving said result, the claims require the use of, for example, **one or more of processors**, a travel agency **system**, a travel provider **system**, and a clearing house **system** that are capable of processing virtual travel transactions without issuance of an electronic or physical ticket (see, e.g., *Ex Parte Edward L. Palmer*, Appeal 2012-003262, February 26, 2015 (2015 WL 933401)

(App. Br. 16) (emphases added).

# Alice — Step One

The first step in our analysis is to determine whether the claims at issue are directed to a patent-ineligible concept, such as an **abstract idea**. *See Alice*, 134 S. Ct. at 2355.

If the claims are directed to a patent-ineligible concept, the second step in the analysis is to "consider the elements of each claim both individually and 'as an ordered combination' to determine whether [there are] additional elements that 'transform the nature of the claim' into a patent-eligible application." *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297).

In other words, the second step is to "search for an 'inventive concept'—i.e., an element or combination of elements that is 'sufficient to

ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* (brackets in original) (quoting *Mayo*, 132 S. Ct. at 1294).

Turning to the first *Alice* step in our analysis, we have reviewed all of Appellants' arguments and find them unpersuasive. (App. Br. 14–19; Reply Br. 1–4). We conclude each of the claims before us on appeal merely implements mental steps and decisions similar to those typically performed by travel or airline agents, **using a computer**.

Regarding the claimed steps or functions performed by a **computer**, we note the Supreme Court in *Alice* cautions that merely limiting the use of an abstract idea "to a particular technological environment" or implementing the abstract idea on a "wholly generic computer" is not sufficient as an additional feature to provide "practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself." *Alice*, 134 S. Ct. at 2358 (internal quotation marks and citations omitted).

Nevertheless, Appellants urge: "To perform the recited actions for achieving said result, the claims require the use of, for example, **one or more of processors**, a travel agency system, a travel provider system, and a clearing house system . . . ." (App. Br. 16) (emphasis added).

However, we conclude each of Appellants' claims on appeal is distinguishable from the type of claim considered by the court in *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). We conclude none of Appellants' claims is "directed to an improvement in the functioning of a computer," as was found by the court regarding the subject claim in *Enfish*, 822 F.3d at 1338. To the extent that the recited steps or acts (or functions)

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may be performed faster or more efficiently using a computer, our reviewing court provides applicable guidance:

While the claimed system and method certainly purport to accelerate the process of analyzing audit log data, **the speed increase comes from the capabilities of a general-purpose computer, rather than the patented method itself**. *See Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) ("[T]he fact that the required calculations could be performed **more efficiently** via a computer does not materially alter the patent eligibility of the claimed subject matter.").

FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1095 (Fed. Cir. 2016) (emphasis added).

Applying this reasoning to Appellants' claims on appeal, we similarly find any purported faster or more efficient performance of the claimed steps or acts (or functions) merely comes from the capabilities of a general-purpose computer, rather than from Appellants' claimed steps or functions.

Moreover, we agree with the Examiner's findings:

As noted in the ground of rejection, the subject matter of claims 1-11 and 14-23 require no more than a performing of **generic computer functions** (e.g. determining conditions, generating an electronic record, requesting a value, adding a value to an electronic record, modifying a pre-existing electronic record, transmitting an electronic record to another computer system, providing instructions, and receiving payment) that are well-understood, routine and conventional activities previously known to the industry.

(Final Act. 4) (emphasis added).

We note the Board Decisions cited in Appellants' Briefs for persuasive authority are not precedential PTAB (or BPAI) Decisions.

We find the claims considered by the Court in *Electric Power Grp.*, *LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016) are analogous to Appellants' claims, to the extent that Appellants' claims similarly collect information, analyze it in some fashion, and present or communicate the result. The Court in *Electric Power* guides: "we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category." 830 F.3d at 1354 (internal citations omitted).

Applying this reasoning here, we conclude a person would be capable of performing Appellants' claimed steps or functions as mental steps, or with the aid of pen and paper. As pertaining to all claims on appeal, we find a person would be fully capable of performing the steps of determining, generating, requesting, and adding in the human mind or with the aid of pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) ("That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*"). "[A] method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101." (*Id.* at 1373).<sup>1</sup>

It is clear that unpatentable mental processes are the subject matter of claim 3. All of claim 3's method steps can be performed in the human mind, or by a human using a pen and paper. Claim 3 does not limit its scope to any particular fraud detection algorithm, and no algorithms are disclosed in the '154 patent's specification. Rather, the broad scope of claim 3 extends to essentially any method of detecting credit card

<sup>&</sup>lt;sup>1</sup> See also CyberSource, 654 F.3d at 1372:

For at least these reasons, we conclude all claims 1–11 and 14–23 on appeal are directed to an abstract idea.

### Alice — Step Two

Proceeding to step two of the *Alice* test articulated by the Supreme Court, we further "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298, 1297).

Regarding step two of the Alice analysis, Appellants contend, *interalia*:

Further with regard to the second step, Appellant notes that the subject matter of claims 1-11 and 14-23 is rooted in computer technology in order to overcome problems specifically arising in the realm of computer-implemented reservation systems, which qualifies claims 1-11 and 14-23 as patent-eligible subject matter (see, e.g., DDR Holdings, LLC v. Hotels.com, LP (Fed. Cir. 2014)). In short, the subject matter of claims 1-11 and 14-23 is directed to implementing ticketless travel transactions using virtual travel transactions that provide evidence of a right to compensation, that eliminate the use of duplicate information provided in both reservation records and electronic ticket information, and that can be used in accounting and transaction records of legacy systems in a substantially similar manner as electronic and paper ticket numbers, thereby eliminating the need to manage electronic or physical tickets (see, e.g., Spec., ¶ [0012]). Thus, the solution provided by claims 1-11 and 14-23 "is tethered to the technology that created the problem." (see

fraud based on information relating past transactions to a particular "Internet address," even methods that can be performed in the human mind. (emphasis added). Messaging Gateway Solutions, LLC v. Amdocs, Inc. et al., D. Del., 1-14-cv-00732 (April 15, 2015)). (App. Br. 18).

Here, we conclude the *nature* of claims 1–11 and 14–23 is not *transformed* into a patent-eligible application of the abstract idea presented, because these claims do nothing more than simply instruct the practitioner to implement an abstract idea using a generic computer.

Appellants cite to *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014) in support. (App. Br. 18). In *DDR Holdings* the subject claim was held patent-eligible because it encompassed "an inventive concept" for resolving a "particular Internet-centric problem." In contrast, we find Appellants' "computer-implemented process for processing ticketless travel transactions" (claim 1) does not provide a solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *DDR*, 773 F.3d at 1257.

Because we find all claims on appeal merely use a generic computer or processor as a **tool** which is used in the way a computer normally functions, we conclude claims 1–11 and 14–23 fail to impart any discernible improvement upon the computer or processor, nor do Appellants' claims solve "a challenge particular to the Internet" as considered by the court in *DDR*, 773 F.3d at 1256–57.

Thus, we conclude none of Appellants' claims are like the claim held patent-eligible by the court in DDR, in which the claimed invention was directed to the "challenge of retaining control over the attention of the customer in the context of the Internet," such that:

Instead of the computer network operating in its normal, expected manner by sending the website visitor to the third-party website that appears to be connected with the clicked advertisement, the claimed system generates and directs the visitor to the above-described hybrid web page that presents product information from the third-party and visual "look and feel" elements from the host website.

DDR, 773 F.3d at 1258–59.

Regarding step two of the *Alice* test, we find nothing in claims 1–11 and 14–23 that adds anything "significantly more" to transform the abstract concepts of determining, generating, requesting, and adding information into a patent-eligible application. *See Alice*, 134 S. Ct. at 2357.

Appellants do not argue that each of the steps or functions recited in claims 1–11 and 14–23 is individually inventive. None of Appellants' arguments persuasively show that some **inventive concept** arises from the **ordered combination** of these steps or functions, which, even if true, would be unpersuasive given that we conclude Appellants' claims are directed to ordinary steps (or functions) in data analysis, and are recited in the ordinary order, i.e., following a general pattern of collecting, analyzing, and communicating the results of the analyzed information. *See Elec. Power*, 830 F.3d at 1355.

The "machine-or-transformation" (MoT) test

As recognized by the Federal Circuit in *Ultramercial, Inc. v. Hulu*, *LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014), the "machine-ortransformation" (MoT) test, as outlined in *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008), can provide a "useful clue" in the second step of the *Alice* framework. Under *Bilski's* MoT test, a claimed process is patent-eligible under § 101 if:

- (1) it is tied to a particular machine or apparatus; or
- (2) the process transforms a particular article into a different state or thing. *Bilski*, 545 F.3d at 954 (citing *Gottschalk*, 409 U.S. at 70).

Contrary to Appellants' arguments (App. Br. 14–19; Reply Br. 1–4), we find Appellants' "computer-implemented process for processing ticketless travel transactions" (claim 1), "computer-implemented process for digitally processing travel changes between travel providers in ticketless travel transactions" (claim 11), and "system for processing ticketless travel transactions" (claim 19) are neither sufficiently tied to a particular machine or apparatus, nor involved in any type of transformation of any particular article.<sup>2</sup>

In contrast to *DDR Holdings* and *Enfish*, in which the Federal Circuit held that claims directed to specific improvements in Internet or computer capabilities are patent-eligible subject matter, Appellants' claims are neither rooted in computer technology, nor do they seek to improve any type of computer capabilities, such as *Enfish*'s "self-referential table for a computer database." *Enfish*, 822 F.3d at 1336. Instead, we conclude Appellants' claims are broadly directed to abstract concepts of collecting, analyzing, and

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<sup>&</sup>lt;sup>2</sup> See Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting "generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer" not patent eligible); and Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) ("[s]imply adding a 'computer aided' limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible" (internal citation omitted)).

communicating the results of the analyzed information in the context of processing ticketless travel transactions. *See Elec. Power*, 830 F.3d at 1355.

"[M]erely selecting information, by content or source, for collection [and] analysis . . . does nothing significant to differentiate a process from ordinary mental processes . . . ." *Elec. Power*, 830 F.3d at 1355. Receiving and analyzing (or identifying data), by itself, does not transform an otherwise-abstract process or system of information collection and analysis. *See id.* Like the claims at issue in *Electric Power*, we find Appellants' claims 1–11 and 14–23 "do not invoke any assertedly inventive programing" or require an "arguably inventive set of components or methods." *Id.* 

Here, we find the invocations of conventional, off-the-shelf computer components ("one or more processors" — claim 1) are insufficient to pass as an inventive set of components. As such, our review of the claims, fully considering each claim's elements (both individually and as an ordered combination), fails to show that the nature of any of Appellants' claims 1–11 and 14–23 is transformed into patent-eligible subject matter.

Because we conclude each of Appellants' claims 1–11 and 14–23 are directed to a patent-ineligible abstract concept, and do not recite something "significantly more" under the second step of the *Alice* analysis, we sustain the Examiner's rejection of these claims as being directed to non-statutory subject matter in light of *Alice* and its progeny.

#### Conclusion

On the record before us, Appellants have not persuaded us the Examiner erred in rejecting claims 1–11 and 14–23 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

# **DECISION**

We affirm the Examiner's decision rejecting claims 1–11 and 14–23 under § 101.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

# **AFFIRMED**